

**Statement of Basis - Narrative**  
**NSR**

**Type of Permit Action:** Regular-Significant Revision

**Facility: Belen Compressor Station**

**Company:** El Paso Natural Gas Company, L.L.C.

**Permit No(s):** 3262, 3262M1 and P134R2

**Tempo/IDEA ID No.:** 1590 - PRN20140001

**Permit Writer:** Michael Space

**Fee Tracking (not required for Title V)**

<b>Tracking</b>	<b>NSR tracking entries completed:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>NSR tracking page attached to front cover of permit folder:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>Paid Invoice Attached:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>Balance Due Invoice Attached:</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	<b>Invoice Comments:</b> Balance due \$1,445

<b>Permit Review</b>	<b>Date to Enforcement:</b> NA	<b>Inspector Reviewing:</b> NA
	<b>Date Enf. Review Completed:</b> NA	<b>Date of Reply:</b> (if necessary)
	<b>Date to Applicant:</b> TBD	<b>Date of Reply:</b>
	<b>Date of Comments from EPA:</b> TBD or N/A	<b>Date to EPA:</b> TBD or N/A
	<b>Date to Supervisor:</b> TBD	

**1.0 Plant Process Description:**

The Belen Compressor Station is a natural gas compressor station that is located at UTM Zone13, UTMH 345,980 m, UTMV 3,822,850 m, approximately 4.5 miles southeast of Turn (10.5 miles SE of Belen), New Mexico in Valencia County. The station compresses natural gas for transportation purposes. The facility consists of: 2 (two) General Electric Company Regenerative Cycle Turbines Model Number M3572R, 1 (one) Auxiliary Reciprocating (standby) engine (limited to 500 hours), and 10 (ten) Storage Tanks.

Fugitive VOC emissions from facility plumbing (valves, flanges, etc.) are also identified. HAPs from the engines are identified, but quantities are less than 'major' thresholds. The facility is major for NOx emissions. SO<sub>2</sub> emissions as identified in the permit application are low; emissions of VOC and CO are below the major threshold limit. A calculation check was performed by the NMED-AQB and the applicant SSM/M 10 tpy request is reasonable.

The following note was placed in the 2005 NSR Database Summary: *The Settlement Agreement only allowed emissions limits to be set for NOx as established in the Operating Permit. If and when the facility goes through another NSR modification, the remaining significant pollutants can get emission limits.*

This streamlined permit will not include other significant pollutants except for the SSM/M VOC

limit of 10 tpy as part of this action.

## 2.0 **Description of this Modification:**

This revision seeks to add current and historical startup, shutdown, maintenance, and malfunction emissions (SSM/M1) to the current NSR permit for Belen Compressor Station. The facility is owned and operated by El Paso Natural Gas Company, LLC (EPNG), a Kinder Morgan company. This application is a NSR significant revision, being submitted under 20.2.72.219.D(1)(a).

Belen Compressor Station is currently permitted under Operating Permit P134-R2 and NSR Permit 3262. In this application EPNG is seeking to add a combined 10 tpy VOC SSM/M1 limit to its NSR permit. This is consistent with NMED's policy, issued on June 7, 2012, which allows consolidation of SSM and malfunction emissions: "Instead of permitting SSM and upset/malfunction emissions separately, the applicant may request that emissions from both SSM and upset/malfunction be consolidated in the permit with a limit of 10 tons per year per pollutant per facility for the combined category to reduce concerns about the appropriateness of activities listed as SSM."

SSM/M1 emissions of VOC are expected during blowdowns of compressors and/or full station blowdowns. These events may occur as part of routine maintenance or upset events.

On June 19, 2014, the AQB Bureau Chief responded to the applicant's concern about recordkeeping relative to SSM/M. The email reads:

*For the 10tpy combined SSM/Malf emission limits, EPNG has requested that they not be required to 1) determine and define if an event is Malf or SSM, and 2) not determine the cause of the event. This is due to the amount of resources required to make these determinations.*

*To address EPNG's concerns, AQB proposes to 1) not require a permittee to determine if an event is SSM or Malf under the 10 tpy combined SSM/Malf limit, and 2) not require a record of the "cause" of the event if emissions from the event are 500 lbs or less.*

*To clarify:*

- This would only apply to the combined 10 tpy SSM/Malf emission limit.*
- The 500 lb/event would be per facility not per unit. For example, if one event caused 12 compressors to be vented, the sum of the vented VOC emissions from all 12 compressors would need to be 500 lbs or less in order to avoid having to determine the cause.*
- If the event were more than 500 lbs or if the permittee chose to submit an excess emissions report rather than include the event under the 10 tpy SSM&M permit limit, then the cause of the event would need to be determined and records that the event was a malfunction would need to be kept. It is important to record that the event was a malfunction to differentiate it from SSM emissions since an owner/operator is required to permit routine and predictable emissions under normal operations.*
- 500 lbs x 40 events = 10 tpy*

## 3.0 **Source Determination:**

1. The emission sources evaluated include two turbines (A-1 and A-2).
2. Single Source Analysis:
  - A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes
  - B. Common Ownership or Control: Are the facilities under common ownership or control? Yes
  - C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes
3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

4.0 **PSD Applicability:**

- A. The source, as determined in 3.0 above, is an existing PSD Major Source.
- B. This revision does not involve a modification of the source.
- C. The project emissions for this revision are not significant. The total SSM and Malfunction emissions are less than 40 tons per year VOCs.

5.0 **History (In descending chronological order, showing NSR and TV):** \*The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
3262M1	TBD	NSR Revision	Add SSM and Malfunction Emissions to the permit. The total VOC emissions from these combined sources are less than 40 tons per year. Therefore, a PSD permit per 20.2.74 NMAC is not required.
P134R3	TBD	TV renewal	Changes status of auxiliary generator (AUX-1), which was previously an insignificant activity, but now subject to 40 CFR 63, Subpart ZZZZ; Application also includes greenhouse gases, and minor changes. Permit includes template updates. Incorporates SSM/M1 emissions allowed in NSR 3262M1.
P134R2*	8/12/2009	TV Renewal	P134R2 Title V renewal application, no major changes. Unit numbers are revised.
P134R1M3	4/3/07	Minor Modification	Incorporate requirements of NSR permit 3262 into the operating permit and update template language. Conditions 3.2.1.6, 3.2.1.7., 5.5, and 7.4 were added to update permit.
P134R1M2	11/2/05	Administrative Revision	Changed Responsible Official from David Campbell to Kerry McDonald.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
3262*	11/8/05	Regular - New	New NSR permit required by the Settlement Agreement. Modeling analysis for NSR permit demonstrates compliance.
P134R1M1	8/2/05	Reopening	Corrected language arising from negotiations with EPNG and the Bureau.
P134R1	7/24/05	Renewal	EPNG is seeking to increase allowable NOx emissions over currently permitted limits by adding 10% safety factor. Additionally, CO emissions were increased by 10% and HAP emissions and fugitives were recalculated.
P134	3/11/99	New Operating Permit	This facility consists of 2 regenerative cycle turbines, both manufactured by General Electric Company (Model M3572R) and 8 storage tanks.
Grandfather			The facility was constructed before August 31, 1972 and therefore has not undergone NSR review. Actual Construction date is unknown.

6.0 **Public Response/Concerns:** As of July 23, 2014, this permit writer is aware of two citizens that called on this permit action. They both live out of state but own adjacent land to the facility property and were notified by EPNG of the NSR modification. I provided a verbal summary of the NSR action. They did not ask for further information and they did not provide full names.

7.0 **Compliance Testing:**

This information is not required in the application.

8.0 **Startup and Shutdown:**

The permittee submitted an application to permit routine and predictable startup, shutdown, and maintenance emissions (SSM) and malfunction emissions.

9.0 **Compliance and Enforcement Status [Title V only]:**

Not applicable.

10.0 **Modeling:**

Air dispersion modeling was last submitted in the permit application for 3262 in October 2005, and summarized as follows: *This modeling analysis demonstrates that normal operation of the facility neither causes nor significantly contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NMAAQS for CO, SO2, and NO2 and*

*NAAQS for NO2 Increment analysis.*

No air dispersion modeling was submitted with the current application for adding SSM and Malfunction VOC emissions, and none is required.

11.0 **State Regulatory Analysis(NMAC/AQCR):**

<b>20 NMAC</b>	<b>Title</b>	<b>Applies (Y/N)</b>	<b>Unit(s) or Facility</b>	<b>Comments</b>
<b>2.1</b>	GENERAL PROVISIONS	Yes	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements.
<b>2.3</b>	Ambient Air Quality Standards	Yes	Entire Facility	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. 20.2.3.9 NMAC, LIMITATION OF APPLICABILITY TO 20.2.70 NMAC. The requirements of this part are not applicable requirements under 20.2.70 NMAC, as defined by that part. This section does not limit the applicability of this part to sources required to obtain a permit under 20.2.72 NMAC, nor does it limit which terms and conditions of permits issued pursuant to 20.2.72 NMAC are applicable requirements for permits issued pursuant to 20.2.70 NMAC.
<b>2.7</b>	Excess Emissions	Yes	Entire Facility	Applies to all facilities' sources
<b>2.61</b>	Smoke and Visible Emissions	Yes	Units A-1, A-2, and AUX-A1	Turbines A-1 and A-2 and engines AUX-A1 are Stationary Combustion Equipment. Compliance is achieved by using pipeline quality natural gas.
<b>2.70</b>	Operating Permits	Yes	Entire Facility	This regulation is applicable because the station is a major source of NO <sub>2</sub> emissions.
<b>2.71</b>	Operating Permit Fees	Yes	Entire Facility	Source is subject to 20.2.70 NMAC as cited at 20.2.71.109 NMAC.
<b>2.72</b>	Construction Permits	Yes	Entire Facility	20.2.72.200 (A2) NMAC
<b>2.73</b>	NOI & Emissions Inventory Requirements	Yes	Entire Facility	PER > 10 pph or 25 tpy for a criteria pollutant
<b>2.74</b>	Permits-Prevention of Significant Deterioration	Yes	Entire Facility	Applicable to all facilities that require a permit.
<b>2.75</b>	Construction Permit Fees	Yes	Entire Facility	PER > 10 tpy for criteria pollutant
<b>2.79</b>	Permits – Nonattainment Areas	No		Source is a PSD major source, but has not had a major mod to major source. PTE = 338 tpy of NO <sub>x</sub>

20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Comments
2.82	MACT Standards for Source Categories of HAPs	Yes	Aux-A1	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63, as amended through January 31, 2009. The facility has units subject to a MACT standard, as amended through August 29, 2013. The portion of the MACT ZZZZ that covers AUX-A1 was promulgated after August 29, 2013. Units A-1 and A-2 are not subject to any MACT standards.

### 12.0 Federal Regulatory Analysis:

Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Applies (Y/N)	Unit(s) or Facility	Comments
C	Federal Ambient Air Quality Standards	Yes		Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.

MACT Subpart (40 CFR 63)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
A	General Provisions	Yes	Aux-A1	Applies if any other subpart applies and MACT ZZZZ applies
40 CFR 63 Subpart ZZZZ (Quad Z)	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	Aux-A1	<p>AUX-A1 is an existing emergency generator at an area source of HAPs. With the recent updates to MACT ZZZZ, this unit now has applicable requirements:</p> <ul style="list-style-type: none"> <li>• Comply with applicable requirements by October 19, 2013 [§63.6595(a)(1)]</li> <li>• Operate and maintain with manufacturer instructions or develop a maintenance plan [§63.6625(e)(3)]</li> <li>• Install a non-resettable hour meter [§63.6625(f)]</li> <li>• Comply with applicable requirements in Table 2d [§63.6603(a)] <ul style="list-style-type: none"> <li>o Change oil filter every 500 hours or annually, whichever comes first</li> <li>o Inspect spark plugs every 1000 hours or annually, whichever comes first, and replace as necessary</li> <li>o Inspect all hoses and belts every 500 hours or annually, whichever comes first, and replace as necessary</li> </ul> </li> <li>• Comply with operating limitations and work or management practices per</li> </ul>

MACT Subpart (40 CFR 63)	Title	Applies (Y/N)	Unit(s) or Facility	Comments
				Table 6 (9) <ul style="list-style-type: none"> <li>• Comply with records [§66.6655(e)(2) and (f)]</li> </ul>

13.0 **Exempt and/or Insignificant Equipment that do not require monitoring:**

Information is not required in the application.

14.0 **New/Modified/Unique Conditions (Format: Condition#: Explanation):**

A. Addition of combined SSM/M to the permit. The monitoring protocol has been modified to allow for the applicant not to have to break out whether each event is SSM or a malfunction, unless it is an excess emission.

15.0 **For Title V action: Cross Reference Table between NSR Permit 3262 and TV Permit P134 . NSR permit conditions cross referenced to the TV permit are federally enforceable conditions, and therefore brought forward into the TV permit:**

Not applicable.

16.0 **Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.**

A. On June 19, 2014, the AQB Bureau Chief responded to the applicant's concern about recordkeeping relative to SSM/M. The email reads, in part: *To address EPNG's concerns, AQB proposes to 1) not require a permittee to determine if an event is SSM or Malf under the 10 tpy combined SSM/Malf limit, and 2) not require a record of the "cause" of the event if emissions from the event are 500 lbs or less.* This does not apply to reportable excess emissions.